Primary Rural - Asphalt Paved

Item	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.			
Temporary Safety Items							
	<u>_</u>						
Traffic Barrier service Concrete	LF	\$10.00	1498.79	\$14,987.90			
Flagger Service	HR	\$10.78	582.12	\$6,275.25			
Channelizing Devices	DAY	\$0.79	12304.38	\$9,720.46			
Arrow Board, Message Board	HR	\$6.23	1120.63	\$6,981.52			
Truck Mounted Attenuator	HR	\$15.94	1.99	\$31.72			
			Subtotal:	\$37 996 86			

Grading (Excavation) Costs					
Clearing and Grubbing (Composit figure)	ACRE	\$5,821.62	2.06	\$11,992.54	
Regular Excavation	CY	\$11.40	3044	\$34,701.60	
			Subtotal:	\$46,694.14	

Drainage Items					
Misc. Concrete	CY	\$923.71	21.34	\$19,711.97	
15" Pipe	LF	\$22.02	539.21	\$11,873.40	
18" Pipe	LF	\$51.44	561.48	\$28,882.53	
36" Pipe	LF	\$89.64	14.95	\$1,340.12	
48" Pipe	LF	\$106.67	150.96	\$16,102.90	
Drop Inlets (DI-1, DI-3B DI-7)	EA	\$2,137.06	12.62	\$26,969.70	
Eros. Control Stone	TON	\$71.30	128.38	\$9,153.49	
Paved Ditch	LF	\$35.05	80.48	\$2,820.82	
	_	_	Subtotal:	\$97,142.97	

Primary Rural - Asphalt Paved

Item	Unit	UNIT COST	Units Lane Mile	Avg	. Cst Lane Mi.
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Pavement Items				
Blotted Seal Coat Ty. D	SY	\$12.86	5866.7	\$75,445.76
Cement Stabilized Aggre #21A	Ton	\$21.72	2574	\$55,907.28
Aggr. No. 21B	Ton	\$22.11	4752	\$105,066.72
Asphalt Ty. SM-12.5	Ton	\$37.75	1226.1	\$46,285.28
Asphalt Ty. IM-19.0	Ton	\$35.60	774.4	\$27,568.64
Asphalt Ty. BM-25.0	Ton	\$52.45	1548.8	\$81,234.56
Concrete	SY		0	\$0.00
Underdrain (Composite)	LF	\$5.44	2640	\$14,361.60
Pavement Markings (Composite)	LF	\$1.03	3300	\$3,399.00
Raised Pavement Markers (Composite)	EA	\$40.68	32	\$1,301.76
			Subtotal:	\$410,570.60

Shoulders and Median Concrete Entrances (Composite 6" & 7") SY \$44.10 64 \$2,822.40 Concrete Curb and Gutter CG-6 LF \$13.16 0 \$0.00 LF \$0.00 Concrete Curb \$11.67 0 SY \$48.41 11 \$532.51 **Entrance Gutter** Right Of Way Monuments \$84.75 5.72 EΑ \$484.77 Guardrail (Composite) LF \$13.70 1628.37 \$22,308.67 Guardrail Terminals \$1,821.11 19.2 \$34,965.31 EΑ Median Barrier Walls LF \$60.28 0 \$0.00 SF 1350 \$28,093.50 Sound Barrier \$20.81 Fence (Composite) LF \$4.31 860.95 \$3,710.69 EΑ \$648.99 Fence Line Braces \$282.17 2.3 Fence Corner Braces EΑ \$282.62 3.62 \$1,023.08

Roadside Development					
Seeding (Composite)	LBS	\$13.23	67	\$886.41	
Erosion Control Mulch	SY	\$0.61	1613	\$983.93	
Temp. Erosion Control (Composite)	LF	\$2.82	5280	\$14,889.60	
Siltation Control Excavation	CY	\$17.67	897.6	\$15,860.59	
Planting (Composite)	EA	\$76.55	0	\$0.00	
Watering	UNIT	\$71.80	0	\$0.00	
•				****	

Subtotal: \$32,620.53

\$94,589.93

Subtotal:

Base Values, to inflate for current year values please use rates from http://www.bls.gov/cpi .

Primary Rural - Asphalt Paved

Item	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.	
Stormwater Management					
Stormwater Management Excavation	CY	\$4.90	500	\$2,450.00	

Signals and Signs					
Sign Panels	SF	\$24.80	154.75	\$3,837.80	
Sign Posts (Composite wood and steel)	LF	\$17.24	240	\$4,137.60	
Intersection Signalization (Composite)	EA	\$38,738.90	0.05	\$1,936.95	
Overhead Signing (Composite)	EA		0	\$0.00	
Roadway Lighting (Composite)	EA		0	\$0.00	
Traffic Management System	EA	\$0.00	0	\$0.00	
			Subtotal:	\$9,912.35	

Utilities (Water and Sewer)					
Water Service Lines (Composite)	LF	\$22.10	290	\$6,409.00	
Water Mains (Composite)	LF	\$49.87	1237	\$61,689.19	
Sewer Pipe (Composite)	LF	\$46.21	573	\$26,478.33	

 Subtotal:
 \$94,576.52

 Total:
 \$826,553.89

 add Surveying:
 \$9,765.54

 add Mobilization:
 \$67,723.96

Estimated Cost per Lane Mile -- GRAND TOTAL: \$904,043.39

Primary Rural - Concrete Paved

Item	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.			
Temporary Safety Items							
Traffic Barrier service Concrete	LF	\$10.00	1498.79	\$14,987.90			
Flagger Service	HR	\$10.78	582.12	\$6,275.25			
Channelizing Devices	DAY	\$0.79	12304.38	\$9,720.46			
Arrow Board, Message Board	HR	\$6.23	1120.63	\$6,981.52			
Truck Mounted Attenuator	HR	\$15.94	1.99	\$31.72			
			Subtotal:	\$37,996.86			

Grading (Excavation) Costs					
Clearing and Grubbing (Composit figure)	ACRE	\$5,821.62	2.06	\$11,992.54	
Regular Excavation	CY	\$11.40	3044	\$34,701.60	
			Subtotal:	\$46,694.14	

Drainage Items				
Misc. Concrete	CY	\$923.71	21.34	\$19,711.97
15" Pipe	LF	\$22.02	539.21	\$11,873.40
18" Pipe	LF	\$51.44	561.48	\$28,882.53
36" Pipe	LF	\$89.64	14.95	\$1,340.12
48" Pipe	LF	\$106.67	150.96	\$16,102.90
Drop Inlets (DI-1, DI-3B DI-7)	EA	\$2,137.06	12.62	\$26,969.70
Eros. Control Stone	TON	\$71.30	128.38	\$9,153.49
Paved Ditch	LF	\$35.05	80.48	\$2,820.82
_		<u>. </u>	Subtotal:	\$97,142.97

Primary Rural - Concrete Paved

Item	Unit	UNIT COST	Units Lane Mile	Avg	. Cst Lane Mi.
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Pavement Items						
Blotted Seal Coat Ty. D	SY	\$12.86	5866.7	\$75,445.76		
Cement Stabilized Aggre #21A	Ton	\$21.72	3432	\$74,543.04		
Aggr. No. 21B	Ton	\$22.11	2178	\$48,155.58		
Asphalt Ty. SM-12.5	Ton	\$37.75	645.3	\$24,360.08		
Asphalt Ty. IM-19.0	Ton	\$35.60	0	\$0.00		
Asphalt Ty. BM-25.0	Ton	\$52.45	0	\$0.00		
Concrete	SY	\$51.00	7040	\$359,040.00		
Underdrain (Composite)	LF	\$5.44	2640	\$14,361.60		
Pavement Markings (Composite)	LF	\$1.03	3300	\$3,399.00		
Raised Pavement Markers (Composite)	EA	\$40.68	32	\$1,301.76		
			Subtotal:	\$600,606.82		

Shoulders and Median Concrete Entrances (Composite 6" & 7") SY \$44.10 64 \$2,822.40 LF Concrete Curb and Gutter CG-6 \$13.16 0 \$0.00 LF \$11.67 \$0.00 Concrete Curb 0 Entrance Gutter SY \$48.41 11 \$532.51 Right Of Way Monuments \$84.75 5.72 \$484.77 EΑ 1628.37 Guardrail (Composite) LF \$13.70 \$22,308.67 Guardrail Terminals \$1,821.11 19.2 \$34,965.31 EΑ Median Barrier Walls LF \$60.28 0 \$0.00 SF \$20.81 0 \$0.00 Sound Barrier Fence (Composite) 860.95 \$3,710.69 LF \$4.31 EΑ \$282.17 \$648.99 Fence Line Braces 2.3 Fence Corner Braces EΑ \$282.62 3.62 \$1,023.08

Subtotal: \$66,496.43

Primary Rural - Concrete Paved

lán m	I Imi4	LIMIT COCT	Units Lane Mile	A >	Cot Lone Mi
ltem	Unit	UNII COST	Units Lane wife	Avg.	CSt Lane Wil.

Roadside Development						
Seeding (Composite)	LBS	\$13.23	67	\$886.41		
Erosion Control Mulch	SY	\$0.61	1613	\$983.93		
Temp. Erosion Control (Composite)	LF	\$2.82	5280	\$14,889.60		
Siltation Control Excavation	CY	\$17.67	897.6	\$15,860.59		
Planting (Composite)	EA	\$76.55	0	\$0.00		
Watering	UNIT	\$71.80	0	\$0.00		
_			Subtotal:	\$32,620.53		

 Stormwater Management

 Stormwater Management Excavation
 CY
 \$4.90
 500
 \$2,450.00

Signals and Signs					
Sign Panels	SF	\$24.80	154.75	\$3,837.80	
Sign Posts (Composite wood and steel)	LF	\$7.25	240	\$1,740.00	
Intersection Signalization (Composite)	EA	\$89,734.26	0.05	\$4,486.71	
Overhead Signing (Composite)	EA		0	\$0.00	
Roadway Lighting (Composite)	EA		0	\$0.00	
Traffic Management Systen	EA		0	\$0.00	
			Subtotal:	\$10,064.51	

Utilities (Water and Sewer) Water Service Lines (Composite) LF \$22.10 290 \$6,409.00 Water Mains (Composite) LF \$49.87 1237 \$61,689.19 Sewer Pipe (Composite) LF \$46.21 573 \$26,478.33

 Subtotal:
 \$94,576.52

 Total:
 \$988,648.78

 add Surveying:
 \$11,386.49

 add Mobilization:
 \$80,002.65

Estimated Cost per Lane Mile -- GRAND TOTAL: \$1,080,037.91

Primary Urban - Asphalt Paved

Item	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.
Ten	nporary	Safety Item	s	
Traffic Barrier service Concrete	LF	\$10.00	287.73	\$2,877.30
Flagger Service	HR	\$10.78	593.44	\$6,397.28
Channelizing Devices	DAY	\$0.79	14663.62	\$11,584.26
Arrow Board, Message Board	HR	\$6.23	436.6	\$2,720.02
Truck Mounted Attenuator	HR	\$15.94	2.26	\$36.02
			Subtotal:	\$23,614.89

Grading (Excavation) Costs					
Clearing and Grubbing (Composit figure)	ACRE	\$5,821.62	2.06	\$11,992.54	
Regular Excavation	CY	\$11.40	685	\$7,809.00	
			Subtotal:	\$19 801 54	

Drainage Items					
Misc. Concrete	CY	\$923.71	19.63	\$18,132.43	
15" Pipe	LF	\$22.02	746.00	\$16,426.92	
18" Pipe	LF	\$51.44	314.25	\$16,165.02	
36" Pipe	LF	\$89.64	12.73	\$1,141.12	
48" Pipe	LF	\$106.67	122.96	\$13,116.14	
Drop Inlets (DI-1, DI-3B DI-7)	EA	\$2,137.06	16.80	\$35,902.61	
Eros. Control Stone	TON	\$71.30	67.00	\$4,777.10	
Paved Ditch	LF	\$35.05	33.31	\$1,167.52	
			Subtotal:	\$106,828.85	

Primary Urban - Asphalt Paved

Item	Unit	UNIT COST	Units Lane Mile	Αvς	g. Cst Lane Mi.
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Pavement Items						
Blotted Seal Coat Ty. D	SY	\$12.86	0	\$0.00		
Cement Stabilized Aggre #21A	Ton	\$21.72	2772	\$60,207.84		
Aggr. No. 21B	Ton	\$22.11	4950	\$109,444.50		
Asphalt Ty. SM-12.5	Ton	\$37.75	580.8	\$21,925.20		
Asphalt Ty. IM-19.0	Ton	\$35.60	774.4	\$27,568.64		
Asphalt Ty. BM-25.0	Ton	\$52.45	1548.8	\$81,234.56		
Concrete	SY	\$51.00	0	\$0.00		
Underdrain (Composite)	LF	\$5.44	2640	\$14,361.60		
Pavement Markings (Composite)	LF	\$1.03	5940	\$6,118.20		
Raised Pavement Markers (Composite)	EA	\$40.68	32	\$1,301.76		
		_	Subtotal:	\$322,162.30		

Shoo	Shoulders and Median						
Concrete Entrances (Composite 6" & 7")	SY	\$44.10	528	\$23,284.80			
Concrete Curb and Gutter CG-6	LF	\$13.16	2640	\$34,742.40			
Concrete Curb	LF	\$11.67	2640	\$30,808.80			
Entrance Gutter	SY	\$48.41	88	\$4,260.08			
Right Of Way Monuments	EA	\$84.75	15.9	\$1,347.53			
Guardrail (Composite)	LF	\$13.70	745.82	\$10,217.73			
Guardrail Terminals	EA	\$1,821.11	1.45	\$2,640.61			
Median Barrier Walls	LF	\$60.28	0	\$0.00			
Sound Barrier	SF	\$20.81	0	\$0.00			
Fence (Composite)	LF	\$4.31	1375.32	\$5,927.63			
Fence Line Braces	EA	\$282.17	2.03	\$572.81			
Fence Corner Braces	EA	\$282.62	2.45	\$692.42			

Subtotal: \$114,494.80

Primary Urban - Asphalt Paved

ltem	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.

Roadside Development						
Seeding (Composite)	LBS	13.23	290.9	\$3,848.61		
Erosion Control Mulch	SY	\$0.61	7040	\$4,294.40		
Temp. Erosion Control (Composite)	LF	\$2.82	5280	\$14,889.60		
Siltation Control Excavation	CY	\$17.67	897.6	\$15,860.59		
Planting (Composite)	LS	\$23,570.40	0.25	\$5,892.60		
Watering	UNIT	\$71.80	4.25	\$305.15		

Subtotal: \$45,090.95

Stormwater Management						
Stormwater Management Excavation	CY	\$4.90	1000	\$4,900.00		

Signals and Signs						
Sign Panels	SF	\$24.80	539.75	\$13,385.80		
Sign Posts (Composite wood and steel)	LF	\$17.24	960	\$16,550.40		
Intersection Signalization (Composite)	EA	\$89,734.26	0.165	\$14,806.15		
Overhead Signing (Composite)	EA	\$7,443.14	8	\$59,545.12		
Roadway Lighting (Composite)	EA	\$54,170.00	0.25	\$13,542.50		
Traffic Management System	EA			\$0.00		

Subtotal: \$117,829.97

Utilities (Water and Sewer)						
Water Service Lines (Composite)	LF	\$22.10	290	\$6,409.00		
Water Mains (Composite)	LF	\$49.87	880	\$43,885.60		
Sewer Pipe (Composite)	LF	\$46.21	665	\$30,729.65		

 Subtotal:
 \$81,024.25

 Total:
 \$835,747.55

 add Surveying:
 \$9,857.48

 add Mobilization:
 \$68,420.38

Estimated Cost per Lane Mile -- GRAND TOTAL: \$914,025.40

Primary Urban - Concrete Paved

Item	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.
	Temporary	Safety Iten	าร	
Traffic Barrier service Concrete	LF	\$10.00	287.73	\$2,877.30
Flagger Service	HR	\$10.78	593.44	\$6,397.28
Channelizing Devices	DAY	\$0.79	14663.62	\$11,584.26
Arrow Board, Message Board	HR	\$6.23	436.6	\$2,720.02
Truck Mounted Attenuator	HR	\$15.94	2.26	\$36.02
			Subtotal:	\$23 614 89

Grading (Excavation) Costs						
Clearing and Grubbing (Composit figure)	ACRE	\$5,821.62	2.06	\$11,992.54		
Regular Excavation	CY	\$11.40	685	\$7,809.00		
			Subtotal:	\$19 801 54		

Drainage Items					
Misc. Concrete	CY	\$923.71	19.63	\$18,132.43	
15" Pipe	LF	\$22.02	746.00	\$16,426.92	
18" Pipe	LF	\$51.44	314.25	\$16,165.02	
36" Pipe	LF	\$89.64	12.73	\$1,141.12	
48" Pipe	LF	\$106.67	122.96	\$13,116.14	
Drop Inlets (DI-1, DI-3B DI-7)	EA	\$2,137.06	16.80	\$35,902.61	
Eros. Control Stone	TON	\$71.30	67.00	\$4,777.10	
Paved Ditch	LF	\$35.05	33.31	\$1,167.52	
			Subtotal:	\$106,828.85	

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Primary Urban - Concrete Paved

Item Unit UNIT COST Units Lane Mile Avg. Cst Lane Mi.	Item	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.
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Pavement Items						
Diattor Cool Coot Tr. D	_		0	¢0.00		
Blotted Seal Coat Ty. D	SY	\$12.86		\$0.00		
Cement Stabilized Aggre #21A	Ton	\$21.72	3696	\$80,277.12		
Aggr. No. 21B	Ton	\$22.11	0	\$0.00		
Asphalt Ty. SM-12.5	Ton	\$37.75	0	\$0.00		
Asphalt Ty. IM-19.0	Ton	\$35.60	0	\$0.00		
Asphalt Ty. BM-25.0	Ton	\$52.45	0	\$0.00		
Concrete	SY	\$51.00	7040	\$359,040.00		
Underdrain (Composite)	LF	\$5.44	2640	\$14,361.60		
Pavement Markings (Composite)	LF	\$1.03	5940	\$6,118.20		
Raised Pavement Markers (Composite)	EA	\$40.68	26	\$1,057.68		
			Subtotal:	\$460 854 60		

Shoulders and Median						
Concrete Entrances (Composite 6" & 7")	SY	\$44.10	528	\$23,284.80		
Concrete Curb and Gutter CG-6	LF	\$13.16	2640	\$34,742.40		
Concrete Curb	LF	\$11.67	2640	\$30,808.80		
Entrance Gutter	SY	\$48.41	88	\$4,260.08		
Right Of Way Monuments	EA	\$84.75	15.9	\$1,347.53		
Guardrail (Composite)	LF	\$13.70	745.82	\$10,217.73		
Guardrail Terminals	EA	\$1,821.11	1.45	\$2,640.61		
Median Barrier Walls	LF	\$60.28	0	\$0.00		
Sound Barrier	SF	\$20.81	0	\$0.00		
Fence (Composite)	LF	\$4.31	1375.32	\$5,927.63		
Fence Line Braces	EA	\$282.17	2.03	\$572.81		
Fence Corner Braces	EA	\$282.62	2.45	\$692.42		

Subtotal: \$114,494.80

Roadside Development						
Seeding (Composite)	LBS	13.23	290.9	\$3,848.61		
Erosion Control Mulch	SY	\$0.61	7040	\$4,294.40		
Temp. Erosion Control (Composite)	LF	\$2.82	5280	\$14,889.60		
Siltation Control Excavation	CY	\$17.67	897.6	\$15,860.59		
Planting (Composite)	LS	\$23,570.40	0.25	\$5,892.60		
Watering	UNIT	\$71.80	4.25	\$305.15		

Subtotal: \$45,090.95

Base Values, to inflate for current year values please use rates from http://www.bls.gov/cpi .

Primary Urban - Concrete Paved

Item	Unit	UNIT COST	Units Lane Mile	Avg. Cst Lane Mi.

Stormwater Management								
Stormwater Management Excavation	CY	\$4.90	1000	\$4,900.00				

Signals and Signs							
Sign Panels	SF	\$24.80	539.75	\$13,385.80			
Sign Posts (Composite wood and steel)	LF	\$17.24	960	\$16,550.40			
Intersection Signalization (Composite)	EA	\$89,734.26	0.165	\$14,806.15			
Overhead Signing (Composite)	EA	\$7,443.14	8	\$59,545.12			
Roadway Lighting (Composite)	EA	\$54,170.00	0.25	\$13,542.50			
Traffic Management System	EA			\$0.00			
			Culatatali	¢447,000,07			

Subtotal: \$117,829.97

Utilities (Water and Sewer)								
Water Service Lines (Composite)	LF	\$22.10	290	\$6,409.00				
Water Mains (Composite)	LF	\$49.87	880	\$43,885.60				
Sewer Pipe (Composite)	LF	\$46.21	665	\$30,729.65				

 Subtotal:
 \$81,024.25

 Total:
 \$974,439.85

 add Surveying:
 \$11,244.40

 add Mobilization:
 \$78,926.32

Estimated Cost per Lane Mile -- GRAND TOTAL: \$1,064,610.56